PRESERVED

App. F. IX-4

1931-2 (C.V)

File No. 24-31

Serial Nos. 1-3

Previous References

C. V 40-30 (1-3).

PRESERVED

Later References

C. V 31-32 (1-3)

General and Revenue Secretariat.

Serial Nos. Three

Part B for March 32

SUBJECT.

Administration Report of the Jorum Institute for 1930-1

D 3189-3 dt 28-12-31

To Dir of Agri Jeypore Sadgar.

Review No ——

12

General and Revenue Secretariat | C/File No. 24 of 193 /.

Serial No.

No Per 459/31-32 d/ 1.10.31.
From the Dir: of Agriculture

Submits the administration report of the Serum Institute for 30.31.

Subd 1. A Copy of the report will be sent to the Adm: Report Sect: in the 1st instance.

Copy to the Supdt Govt Press to print 500 —

Sd/
5/10

A-Hoplum — Issue
5/10/31

TYPING SECTION
5 OCT. 1931
11.35 P.M.
GEN. & REV. SECT.

2 To the Supdt Govt Press No 8/874 d/ 7.10.31
Forward 5 Copies of the report being sent in type & kept ready for being printed with the Review.

To the Administration Report Sect for kindly taking a Copy of the report

Sd/
8/10

KD
8/10

Copy retained
Sd/
9/10

Please publish [illegible]
as revised.
9/10/31

WD 02553—GPB—50,000—8.7.30

1347

C File No. 24 of 1931 | General and Revenue Secretariat

Draft Review Subd
ok
1/12

Please put up fair draft as revised.
9/12/31

To typing Section for favour of a typed draft
Ead
9/12

Subd
typed draft put up
Ead
10/12

For approval
11/12/31

Dev Secy)
2nd member)

MS
15/12

15/12

MMC 17/12/31

MS
17/12

Issue 18/12

TYPING SECTION
9. DEC 1931
4-30 P.M.
GEN. & REV. SECT.

OFFICE OF THE FIRST MEMBER OF COUNCIL
16 DEC 1931
No. 3824

TYPING SECTION
18. DEC. 1931
GENL. & REV SECT.

To The Dir. of Agri.
" Senior Surgeon.
No. D-3182-3 22/12/31
Reviews the report.

3

B

GEN. & DEVELOPMENT BRANCH
14/3/32.

C.V. 24-31-1 (1)

Telegraphic Address: "Agri., Bangalore"
Code: 5th Edition A. B. C.

DEPARTMENT OF AGRICULTURE

MYSORE STATE.

GEN. SECRETARIAT. 3 OCT. 1931 DEVELOPMENT BRANCH.

Very Urgent.

In reply please quote in full the Nos. and indicative symbol given below.

Per 45 of 31-32. 6. One Report in triplicate

BANGALORE, October 1, 1931

D 1347

FROM

LESLIE C. COLEMAN, ESQ., M.A., PH.D., C.I.E.,

DIRECTOR OF AGRICULTURE IN MYSORE,

BANGALORE.

To

B.T. Kesaviengar, Esq., B.A.,

Secretary to the Government of Mysore,

Development Department, Bangalore.

SIR,

I have the honour to enclose herewith (in triplicate) the report of the Serum Institute for the year 1930-31 with my introductory remarks.

I have the honour to be,
Sir,
Your most obedient servant,

Director of Agriculture.

dsr

RIAT.

Introduction

The steady reduction in the number of Rinderpest out breaks in the State has led to a reduced demand for antirinderpest serum. This was however partly counterbalanced by an increase in demand from outside the State. The total production of antirinderpest serum was 11,22,016 doses or approximately one lakh of doses less than the previous year. There was a large increase in the sale of Serum to Hyderabad, Madras, Cochin and certain other South Indian States, the total sold being 1,01,807 doses as compared with 2,150 doses the previous year. If we can maintain a fairly steady demand for our serum from outside the State it will help greatly to stabilize production.

While the unit cost of serum rose slightly from 11 pies to 13 pies per dose, the unit cost of virus was greatly reduced (8 pies per c.c. as compared with 12 pies per c.c. the previous year). This latter was due to a much more efficient use of the virus producing animals.

The observations made by Dr. Parthasarathi on the failure of the serum simultaneous method of inoculation to confer lasting immunity on young animals is of great importance. If further investigations in this connection confirm the observations already made it will mean that we shall have to allow for two inoculations, one during the first year and one later, to give the immunity to desease that is required.

An important step taken during the year has been the manufacture of sera and vaccines for the control of the two cattle diseases next in importance to Rinderpest, Viz. Haemorrhagic Septicaemia and Black Quarter. The crowded conditions prevailing the old institute buildings and compound have allowed for only a beginning in this direction but the results have been decidedly promising with the transfer to our new quarters, a transfer which has been delayed much longer than was expected, it is hoped to sup the whole needs of the State in this regard.

The work during the year has been carried on very efficiently by Dr. Parthasarathi and his staff.

Director of Agriculture.

ANNUAL REPORT OF THE MYSORE SERUM INSTITUTE FOR THE YEAR 1930-31.

GENERAL:- The work of the Institute consisted, as in the previous year, of the production of Anti-Rinderpest Serum and Rinderpest Virus for supplying to Civil Veterinary Department to do S.S. inoculations. The Institute is still situated in the adjoining buildings of the Guest Quarters in "Race View", High Grounds. It was expected at the beginning of the year 1930-31 that the Institute would be shifted to the new buildings at Hebbal by about the end of the year 1930; but as the buildings are not yet completed the Institute is not shifted till now. The incinerator on the design of the one constructed in Java Serum Institute has just been undertaken for execution by the Public Works Department. A bore hole was sunk by the Department of Industries and Commerce at a cost of Rs.1,840/- and the supply of water is expected to vary between 2,000 and 3,000 gallons per hour.

During the year, revised estimates were made by the Bureau of Sanitary Engineering, Public Health Department, for the sanitary fittings and drainage of the premises of the Institute, the former for Rs.3,960/- and the latter for Rs.4,468/. The Government sanction was received for the execution of the works on 30-3-1931 and the works undertaken by the Sanitary Engineer are under execution.

Government in their order No.D.9231-2/C.V. 73-304 dated 30-3-1931 sanctioned the estimate prepared by the Agricultural Engineer for Rs.6,150/-

for the necessary furniture and laboratory furniture. The work ~~xxx~~ undertaken by him is almost complete.

An estimate for Rs.3,883/- that was prepared by the Electrical Department was sanctioned by Government in their order No.D.9752-4/C.V.95-30-2 dated 22-4-1931 and the work is being attended to by the Superintendent, Electrical Department.

A cold chamber of an aggregate capacity of about 1,500 c.ft. is being erected by the General Electric Co. of Madras at a cost of Rs.11,845/- and the work is not yet completed.

A hot room is being constructed by the Agricultural Engineer at a cost of Rs.2,900/- and the completion of the room is delayed as the heating elements have not yet been supplied by the company who undertook to supply them.

RESERVE DEPOT:- When the Institute is shifted to the new buildings, the reserve animals will be stationed in the plantations to the north of Hebbal butts.

ANIMALS:- Animals used at the Institute for the production of the materials were he-buffaloes and buffalo bull calves; Malnad bull calves and later some goats were also purchased in connection with serum test and goat rinderpest virus experiments. At the beginning of the year tender were called for the purchase of the he-buffaloes. As the tender rates received were higher than the rate at which the animals were being purchased, permission was obtained to buy the animals as usual Tenders were called for the supply of he-buffaloes

during 1931-32 and as the rates offered are very favourable the tender system is now adopted.

Tenders for the supply of calves were not called for as it was felt that right type ~~of large number~~ of animals could not be obtained in large numbers from one man. The supply was obtained from 7 suppliers at Rs.15/- each. Later, when one gentleman volunteered to supply at Rs.13/- each, the suppliers were asked whether they would supply at Rs.13/- and as they consented to supply, ~~a contract~~ was made with them for the supply at Rs.13/-. Tenders were called for the supply of calves during 1931-32. The rate offered and accepted is extremely favourab i.e., Rs.9-8-0 as compared to Rs.15/- and Rs.13/- of last year.

No difficulty was felt in purchasing the animals for use but difficulty was greatly felt in disposing of the used animals both he-buffaloes and calves. Cattle dealers from Coimbatore purchased some animals. But, a large majority had to be maintained at Bettahalli where unfortunately there was not much of pasture. They had to be fed on ragi straw at a cost of Rs.5,709/-. Tenders were called for the disposal of the used animals at the beginning of the year and the only tender that was received was accepted. The person who tendered refused to execute the bond and take the animals and was prepared to forego his deposit. The animals could not be disposed of early during the whole of last year. This year tenders were called for and the approved tenderers have executed the necessary agreement bond both for the sale of he-buffaloes and calves. The animals that have not yet come to condition are stationed at Bettahalli. As soon as the animals are ready for disposal,

they will be sold and the depot at the Bettahalli kaval will be closed.

EPIDEMIC DISEASES:- There were no outbreaks of epidemic diseases this year and there was no necessity for the animals to be shifted to Kenchanahalli kaval which has been reserved as an isolation depot. There was no interruption of the routine work of the Institute, as the fecilities for postmortem examination are not good at present, bled animals got occasionally infection of malignant oedema when the carcasses had to be taken out and burnt. During the year the animals were located at the Institute, reserve depot near Sampagai tank and Bettahalli Kaval. The total number of animals that were sent to Bettahalli Kaval during the year was 550 buffaloes and 163 calves.

ESTABLISHMENT:- The establishment consist of one Assistant Superintendent, 6 Veterinary Inspectors, 9 Salustries and 3 Laboratory Attendan

As it has been arranged to prepare other biological preparations as B.Q. Filtrate, B.Q.Serum H.S.Vaccine, H.S.Serum etc., additional establishment involving a cost of Rs.5,004/- per year has been sanctioned in G.O.No.D.510-11/C.V.84-305 date 24-7-1931.

There was no change in he ministerial staff nor in the menial establishment. Though an additional Clerk was sanctioned and provided for in the budget, the appointment was not made as the Government did not give effect to the sanction accorded. Difficulty is felt in carryin out the office work for want of sufficient number of clerks.

LABORATORY:- The work was conducted in the small room as in the previous years with the poor fecilities available. The Officer in charge looked after the work with the help of Mr. R.M.Purushotham, Veterinary Inspector, in the early part of the year. Later, another Veterinary Inspector was also posted to assist in addition to his own work so that another trained hand may be available for the work whenever necessity arose. Mr. R.M.Purushotham who has been working in the Laboratory for the last ~~x~~ 3 years went to Muktesar on leave to attend the Post Graduate Course at his own cost and returned in June 1931. During his absence the other Veterinary Inspector who was working in the Laboratory was doing the work of Mr. R.M.Purushotham.

Laboratory work has increased not only in connection with the routine testing of the R.P. virus and serum but also in connection with the priliminary work undertaken in connection with the production of H.S.Vaccine, B.Q.Filtrate, B.Q. Serum etc. The Government were pleased to sanction the appointment of one Assistant Bacteriologist and one of the Assistant Superintendents working in the Scientific section of the Civil Veterinary Department has been decided upon to be taken on for the place. Further work in connection with investigations were also done in the laboratory.

No. of blood smears of virus animals examined during the year.	1,820
Total number of microscopical examinations done during the year for aerobic cultures in blood.	1,755
No. of plate cultures. ...	1,755
No. of ~~aerobic~~ anaerobic cultures done.	1,755 (origina

75

(done second time)

No. of microscopical examinations done in connection with post mortem both buffaloes and calves.	2,093
No. of post mortems done during the year.	2,122
Total number of brews (serum) examined.	5
Post mortems of rabbits done for H. O.	6

V I R U S:- Buffalo bull calves were solely used for the production of virus. As a result of the observations made during the year 1929-30 the clinical signs that were decided upon for the selection of animals for getting the virus were followed. In consequence, not only there was no difficulty in meeting the demand, but nearly 50% more of virus was supplied though the number of animals used was 25% less than that of the pervious year. Regarding the cost of production, the establishment charges being the same while there was an increased quantity produced and at the same time the cost of the animals was also less, each c.c. of virus costed 8 pies as compared to 1 anna of last year.

A paper on the method and observations in the production of Rinderpest virus was read before the All India Veterinary Conference that was held in Bangalore in December 1930.

Some reports were received from the Civil Veterinary Department about the outbreaks of Rinderpest among the protected animals. Suggestions were made to the Department to use pooled virus instead of single bottle virus used. No reports have been received since.

Total number of buffalo bull calves used during the year. ...	2,440

Quantity of virus produced including the quantity remaining on 1-7-1930.	13,93,175 c.c.
Quantity supplied to Mysore Civil Veterinary Department.	10,98,425 c.c.
Quantity taken by the Veterinary Inspectors of the Institute for inoculating Amritmahal cattle.	7,075 c.c.
Quantity supplied to places outside the State.	N i l
Quantity used in the Institute.	48,775 c.c.
Quantity of virus discarded.	2,33,725 c.c.
Quantity of virus remaining on 1-7-1931.	5,175 c.c.
Cost of calves purchased and used during the year.	Rs.35,614-8-0
Establishment charges (The pay of virus section ⅓ of Officer's pay, 1/3 of office establishment laboratory section and packing section.)	Rs.10,754-4-8
Feeding charges(1/3 of the whole cost is taken)	9,911-5-4
Contingencies (⅓ of the whole cost is taken)	4,792-9-10
Chemicals (1/3 of the whole cost is taken)	347-14-10
Travelling allowance (⅓ of the whole cost is taken)	1,085- 5- 0
	Rs.62,505-15-8
Deduct receipts from the sale of done calves and carcasses.	3,715- 0- 0
Deduct receipts from the probable realisation by the sale of animals on hand at Rs.1-8-0 per animal.	289- 8- 0
	Rs.58,501- 7- 8

13,85,100 c.c. of virus produced cost Rs.58,501-7-8 working out at 8 pies per c.c. of virus as compared with 12 pies per c.c. of last year.

2,35,750 c.c. were produced from 285

animals and had to be rejected as they did not exhibit the clinical signs of the disease. 315 animals could not be infected.

ANTI-RINDERPEST SERUM:- It was proposed to produce 12 lakhs doses during the year and provision was made in the budget accordingly.

He-buffaloes were used for the production of serum as usual. There were on hand at the beginning of the year 159 animals bought out of the allotments of the previous year and during the year 1930-31, 885 animals were purchased making up a total of 1,044 of which 896 were utilised for serum production and 148 were retained for the current year's use and used in July 1931. There were 75 deaths among the animals utilised, 21 before use and 54 during the period of serum production.

The total quantity of serum produced during the year is 11,22,016 doses. There was a stock of 2,71,954 doses thus making up a total of 13,93,970 doses for the year. The Civil Vetrinary Department indented for 9,55,000 does and there was no difficulty in meeting their demand. 101,870 doses were sold to places outside the State and 14,514 doses were used by the Institute for experiments both in the Institute and Amritmahal kavals. The balance of serum on hand at the end of the year was 2,84,390 doses.

Quantity of Serum sold to	Hyderabad-Deccan.	75,280 doses
- do -	Madras	20,000 "
- do -	to Ichalkaranji	1,000 "
- do -	Pudukotah	2,000 "
- do -	Cochin State	3,590 "
Quantity of serum in stock on 1-7-1930.		2,71,954 doses

Quantity of serum produced during the year.	11,22,016	doses
Quantity of serum supplied to Mysore Civil Veterinary Department.	9,55,000	"
Quantity of serum taken by the Veterinary Inspectors of the Institute for inoculating the Amrit-mahal cattle.	5,700	"
Quantity of serum supplied to places outside the State.	1,01,870	"
Quantity of serum used in the Institute.	8,814	"
Quantity of serum remaining on 1 7-1931.	2,84,390	"
Cost of buffaloes purchased and used.	Rs.35,840-0-0	
Establishment charges (Pay of the serum section, ⅓ of Officer's pay, 2/3 of office establishment, laboratory section and packing section)	Rs.25,136-13-6	
Feeding charges (2/3 of the whole cost is taken)	Rs.19,822-10-8	
Contingencies (⅛ of the whole cost is taken)	Rs. 4,792- 2-10	
Chemicals (2/3 of the whole cost is taken)	695-13- 8	
T.A. (⅛ of the whole cost is taken)	1,085- 5 - 0	
Total cost	87,573-4-7	
Deduct receipts from the sale of done buffaloes and carcasses. ...	6,166-0 -0	
Deduct receipts from the probable realisable amount by the sale of used animals on hand at Rs.17-4-0 per pair.	1,035-0 -0	
Nett cost of serum	Rs.80,172-4 - 7	

11,22,016 doses of serum were produced at

a total cost of Rs.80,172-4-7 working at 13 pies per dose of 5 c.c. as against 11 pies of last year.

The increase in cost of serum by 2 pies is due to the maintenance of the establishment for the production of a smaller quantity of serum, the increase in expenditure towards feed, as the reserve animals had to be fed for a long time as they were not required to prepare the serum as usual and the extra expenditure of Rs.5,709 incurred in feeding the used animals at Bettahalli Kaval as the animals could not be sold and as there was no fodder in the Bettahalli or in Gulhatti kavals. Further, the total cost of straw used in the Institute was increased by 25% as the tendered rate accepted by Government was Rs.1-9-0 as compared with Rs.1-5-0 of 1929-30.

The serum testing was done with malnad calves. Total number of calves used for the purpose during the year was 60 at a cost of Rs.1,184-120 excluding the T.A. of the Veterinary Inspector who went for purchasing them. As it is found that buffalo bull calves will also serve the purpose as well as the malnad calves, the latter will not be purchased as a rule unless it is found absolutely necessary.

As per returns of the Superintendent, Civil Veterinary Department, the total number of inoculations done with the material supplied to the Civil Veterinary Department is 1,32,777 S.S. and 549 S.A.

OTHER BIOLOGICAL PRODUCTS:- The work of preparing other biological products was under-

taken during the latter two months of the year.

Haemorrhagic Septicaemia

~~H.S.~~ VACCINE:- As soon as the culture was available H.S.Vaccine was prepared and supplied to the department.

Total quantity produced.	1,790 doses
Quantity supplied to the Civil Veterinary Department.	1,790

Black Quarter

~~B.Q.~~ FILTRATE:- Experiments in connection with the preparation of filtrate were started and 2,450 c.c. of filtrate ~~was~~ were prepared to be ready for use as per arrangement with the Superintendent, Civil Veterinary Department, in ~~the~~ Mandya Taluk. As no reports were received from ~~the~~ Mandya Taluk, the filtrate was arranged to be used in some villages of Bangalore Taluk. As the results received so far have been favourable, arrangements have been made to supply B.Q.Filtrate to the department for general use.

Black Quarter

~~B.Q.~~ SERUM:- The work of producing B.Q. Serum has also been undertaken and the animals were immunised for the purpose and serum produced. The serum is ready and as soon as the test is completed it will be supplied to the Civil Veterinary Department on indent.

Animals used were he-buffaloes that were used for Rinderpest Serum production. The animals were brought to condition and made use of for preparing B.Q. serum. ~~production~~

The total number of animals used ~~were~~ was 10.

Haemorrhagic Septicaemia

~~H.S.~~ SERUM:- As there was no accommodation for the production of H.S.Serum it could not be produced during the year.

SHEEP POX VACCINE:- . The supply of sheep pox vaccine has also been undertaken and information as to the places where epidemics have occured were requested at about the end of the year. The laboratory experiments are being conducted. As soon as the material is produced and tested, it will be issued.

GOAT VIRUS:- During the month of April 1931 as it was learnt that goat virus could be used by itself without serum in protecting animals, experiments were started to see the nature of infection in goats and the nature of infection in buffaloes with goat virus.

39 goats were used and 8 buffalo bull calves were inoculated with the goat virus. As the results looked favourable it was arranged with the Superintendent, Amritmahal Department to do the goat virus inoculations among the Government animals at Heggadadevankote.

As the Superintendent, Civil Veterinary Department, wished to inoculate the Amritmahal animals ~~the~~ 300 c.c. of goat virus was supplied to the Department. It is learnt that the results were favourable. It has been decided by the Director that experiments should be conducted in a systematic manner to ensure that there will be no risk in using goat virus instead of s.s. inoculation. The experiments are being conducted at the Institute.

Total number of goats used in the Institute.	39
Total number of goats used for productin of virus.	16
~~Total quantity of virus used at~~	

Total quantity of virus used at the Institute. 200 c.c.

Total quantity of virus supplied to Civil Veterinary Department, 300 c.c.

INVESTIGATIONS:- Experiments in connection with the theraputic use of Anti-Rinderpest Serum in virus produced animals that have exhibited the signs of the disease were done. 335 animals were subjected to the treatment and it was found that there was no appreciable difference between the animals treated and untreated.

Rinderpest immunity experiment which was started last year was continued. Among the S.S. inoculated and hyperimmunised animals, 102 of varying ages were tested with virus alone one year after the S.S. inoculation. Though there were no deaths among the 102, a large number of animals under one year showed signs of infection. Ten out of thirteen (two months old calves) two out of 3 (four to five months old calves) one out of seven (six months calves) took the infection with clear signs of the disease. Four out of seven (7 months old calves) 6 out of eight (8 months calves) had continued temperature showing that they had a milder infection.

One out of 32 animals between 1 and 2 years of age, one out of 12 animals between 2 and 4 years showed signs of infection. Seventeen animals of over 4 years in age did not take the infection.

These results indicate that calves under 6 months get a fairly good infection and calves between 6 months and one year a milder infection when they are S.S. inoculated, hyperimmunised and

given virus alone one year later. That is, calves under 1 year of age when protected by S.S. inoculation do not retain the complete immunity; but lose it during the course of the year. The period of good immunity increases with the age of the calf. Beyond the age of one year, the animals seem to possess fairly good immunity for one year. Experiments will be continued to see how long the animals ~~beyond 1 year~~ retain the immunity beyond one year.

I may be permitted to acknowledge the good work done by the staff who had to work under very difficult conditions in the Amritmahal kavals in connection with the experiments. The thanks of the Institute are due to Mr. Lakshmipathy, Superintendent of the Amritmahal Department who gave the Institute all the facilities necessary for the work.

CONCLUSION:- Of the total amount Rs.1,96,520 sanctioned by the Government for expenditure during the year 1930-31, a sum of Rs.10,473/- was reappropriated for expenditure in the Agricultural Department proper, leaving Rs.1,86,047/- of which total amount actually spent was Rs.1,63,469-14-10 including the expenditure under "Apparatus, chemicals and Glassware" and under "Buildings and repairs".

Total receipts during the year by the sale of serum and used animals and carcasses and hide etc. was ~~Rs.1,63,469-14-10~~ Rs.29,218-13-0 leaving a net expenditure of Rs.1,34,251-1-10 for the maintenance of the Institute.

I t was anxiously expected that the new buildings would be completed during the year but the completion of the work has been unfortunately

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delayed. It is expected that the Institute will be shifted to its new building at Hebbal before the end of December 1931.

P. G. Carbery

Officer in charge,
Serum Institute.

Appendix P G—1]

SUBJECT .....

.....

.....

Section C.U.

File No. 24-31

Serial No. 2

Diary No. of letter replied to .....

No. L/1874/Sec.o

To The Supdt Govt Press

General and Revenue Secretariat

( )

the *193* .

Date of issue 7/10/31

Signed by H. M. Ch.....

Sir,

I am directed to forward herewith a copy of the report on the Serum Institute for 1930 and to request you to be so good as to have the same printed and ~~a usual number~~ a hundred & fifty copies kept ready for being bound with the Govt review.

The proofs may be sent to this Dept for verification.

I have &c

5/10/31

for Dev: Secy

Copy with Compts to the Dir of Hyg

List of enclosures .....

Copied by .....

Examined by .....

Proceedings of the Government of
H.H.the Maharaja of Mysore.

C.V. 24-31-3

Read:- 17

Letter No.Per.45 of 31-32 dated 1st October 1931 from the Director of Agriculture in Mysore submitting the Report on the Administration of the Serum Institute for the year ended 1930-31.

Order No. D 3182-3 Dated 22nd Dec 1931

Dated Bangalore, the 22/12/31

Recorded.

2. The quantity of Anti-Rinderpest serum prepared was ~~nearly~~ a lakh of doses less than in the last year. This reduction is said to be due to ~~a smaller~~ the decreased demand for the serum consequent on the steady decline in the number of Rinderpest outbreaks. It is reported ~~Government are glad to note~~ that there was an appreciable increase the demand from outside the State particularly from Hyderabad, Madras and Cochin for the serum prepared in the Institute ~~has considerably increased~~ over a lakh of doses having been sold in the year against about 2½ doses in the previous year.

Cost of production. ~~It is reported~~ that the unit cost of serum rose from 11 to 13 pies per dose during the year under review, while the cost of virus was reduced from 3 pies to 2¼ pies per C.C. Similarly ~~by 33⅓~~. Government desire that the cost of production should be kept as low as possible without of course impairing the efficacy of the serum.

Other Biological Products. The preparation of other Biological products such as the manufacture of sera and vaccines for the control of Haemorrhagic Septicoemia and Black Quarter were undertaken by the Institute during the year. Only a beginning has been made. Government hope that further developmen in this direction will be possible after the Institute is transferred to the new buildings near Hebbal.

Investigations. The results of experiments conducted in connection wit the theraputic use of Anti-Rinderpest Serum in virus produced animals shewed that there was no appreciable differenc between animals treated and untreated and the results from Rinderpest immunit experiments conducted so far have shown that one year after the S.S. innoculation calves under 6 months get a fairly good infection, those between 6 months to one year get a milder infection when they are tested with virus alone. Government watch with interest the results of the furthe experiments that the Institute proposes to conduct during the current year.

~~Government are glad to note that good work is being done in~~ the Institute.

Secretary to Govt.,
Development Deptt.

To
The Director of Agriculture in Mysore
The Senior Surgeon in Mysore.

B.K.M.

PROCEEDINGS OF THE GOVERNMENT OF HIS HIGHNESS THE MAHARAJA OF MYSORE.

Read:—

Letter No. Per. 45 of 1931-32 dated 1st October 1931 from the Director of Agriculture in Mysore submitting the Report on the Administration of the Serum Institute for the year ended 1930-31.

Order No. D 3182-3/31 24-11-3

Dated, Bangalore, the ~~21st~~ 22nd December 1931.

R e c o r d e d .

2. The quantity of Anti Rinderpest serum prepared was a lakh of doses less than in the last year. This reduction is said to be due to the decreased demand for the serum consequent on the steady decline in the number of Rinderpest outbreaks. It is reported that there was an appreciable increase in the demand from outside the State particularly from Hyderabad, Madras and Cochin for the serum prepared in the Institute, over a lakh of doses having been sold in the year under review against about 2000 doses in the previous year.

Cost of production.- The unit cost of serum rose from 11 to 13 pies per dose during the year while the similar cost of virus was reduced from 12 to 8 pies per c.c.

Other Biological Products.- Government are glad to note that the institute has taken up the work of manufacturing Sera and Vaccine for the control of diseases other than Rinderpest. Some doses of Haemorrhagic Septicaemia Vaccine are reported to have been prepared and supplied for use. The results of trial of Black-Quarter Filtrate made in the Institute are stated to be promising. Some quantity of Black-Quarter Serum has been produced for purposes of test. Laboratory experiments are also being conducted for making Sheep Pox Vaccine and for using Goat Virus instead of Serum simultaneous inoculation.

Investigations.- It is reported that experiments in regard to the immunity conferred by the Serum Simultaneous method of inoculation against Rinderpest were continued in the year and important observations made. The results of further work on this problem are awaited with interest.

The work of the Institute was very efficiently carried on in the year under report.

Secretary to Government,
Development Department.

To

The Director of Agriculture in Mysore.
The Senior Surgeon in Mysore.

C.R.G.9.

P B. 271

23

App. F VI G 10.

Government of His Highness the Maharaja of Mysore.

GENERAL AND REVENUE DEPARTMENTS

Report on the Administration of the Serum Institute

Review for the ——— for the year 1930-1931

G. O. No. D 3182-3/C.V. 24-31-3 DATED 22nd December 1931

May this be

i. printed ? Yes

ii. treated as a standing order ? No

iii. published in the Gazette English Part ?

iv. translated ? No

v. placed at the disposal of the press ?

iv. published in the Gazette Kannada Part ?

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